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MURDER AND SUICIDE AS DEFENSES AGAINST SCHIZOPHRENIC PSYCHOSIS

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This paper represents an attempt to explain the dynamics involved in a series of bizarre murders that has filled the newspaper headlines in recent months. The striking feature common to all these murders was the lack of an adequate or comprehensible motive. None of them contained any elements of pecuniary gain; nor did they belong to the class of *crimes passionnels*. Their very bizarreness gave them a strongly schizophrenic flavor, even though the murderers were not found to be insane. It was after reading a statement by Federn[1] that *psychopathic behavior may be a defense against schizophrenia*, that we first evolved the hypothesis that murder and suicide may sometimes serve as defenses against the ego disintegrating effects of schizophrenia.

The apparent absence of a comprehensible motive for these murders and our unwillingness to believe that they were committed without a patent motivation stimulated us to speculate. We tentatively concluded that one purpose of these acts of violence could be to discharge overwhelming rage in nonpsychotic ambulatory schizophrenics threatened by a psychotic decompensation. There is plenty of evidence that feelings of rage play an important part in the psychic economy of schizophrenics. It is a common clinical observation that schizophrenics may do violence to themselves or to others while in the throes of an acute psychotic decompensation. These destructive rage outbursts are usually precipitated by or accompanied by delusions and/or hallucinations appropriate to the patient's annihilative conduct. Zilboorg[2] describes the nonpsychotic or ambulatory schizophrenic as being "literally suffused with hatred," and as resembling "a quiescent but inwardly fuming volcano." This rage appears to have its source in frustrations suffered during infancy. Sullivan[3] speaks of a "malevolent transformation of the personality," which occurs

when one's indicated needs for tenderness are constantly rebuffed. Menninger[4] likewise states, "There is much proof that the injuries suffered by those individuals who later become schizophrenic occur very early in infancy." According to him, the child reacts to these unendurable disappointments or wounds with "unassuagable anger." However, this anger is concealed from the outsider and the greatest hatred and bitterness may be felt towards precisely those people with whom the external relationships appear perfectly normal. The patient feels that he has to cover up these feelings, because otherwise people might read his thoughts and then they would not like him and would not be nice to him.

If, as in the potential schizophrenic, hate is abundant and not discharged, it accumulates, leading to progressive isolation and alienation of the afflicted individual from his fellows and, through projection, to an increase in the number of his enemies, antagonists, and malevolent forces directed against him. The imminent annihilation of the ego by the id is frequently projected outward in fantasies of world destruction. If the ego is not to be destroyed, the hatred must somehow be discharged, just as lightning must find a conductor if it is not to wreck the house. This proposition was clearly stated by one of our patients, a borderline schizophrenic, who asserted that if only he could kill his mother, everything would be all right.

Our hypothesis, then, is that *murders and suicides which lack an adequate or comprehensible motive may represent an attempted defense against the outbreak of a schizophrenic psychosis, in which the ego seeks to protect itself from disintegration by discharging the unassuagable anger through an act of violence.* Expressed differently, the common factor in murder and suicide, on the one hand, and schizophrenia, on the other, is that they represent alternative manifestations of unassuagable anger; hence discharge of rage through any *one* of these channels may lessen or obviate the likelihood of its expression through the others. In this way the physical acts of murder or suicide may decrease the danger of psychic damage represented by the schizophrenic psychosis.

In cases of acute onset of schizophrenia the attack is usually preceded by a period of extreme tension and anxiety associated with depression or agitation, in which, presumably, unassuagable anger plays an important role. Millici and Von Salzen[5] assert that the majority of cases of dementia praecox are "post-emotive"; that at the beginning of the illness there is an overwhelming affective situation which the individual is incapable of handling adequately. In his monograph on dementia praecox Jung[6] likewise states that in numerous cases "at the onset of the disease there was a strong affect." In speaking of patients who

after being neurotics for years finally become psychotic, Jung[7] writes:

> For many years the patient fought for the maintenance of his ego, for the supremacy of his control and for the unity of his personality. But at last he gave out—he succumbed to the invader, whom he could suppress no longer. He is not merely overcome by a violent emotion, he is really drowned in a flood of insurmountably strong forces and thought forms, which are far beyond any ordinary emotion, no matter how violent.

It is true that in some cases the onset of schizophrenia is gradual and insidious. These patients may be more passive types who offer little resistance to the disease, and in whom the "unassuagable anger" slowly eats away at the ego like a cancer. The more active characters struggle with their disease and resist its onset as long as their ego-strength will permit. When the breaking point is finally reached, they may either give up the struggle and succumb to the disease, or they may make some desperate last-minute attempt to ward off psychosis. Wilmanns[8] cites the frequency with which, in response to unrest in the prodromal stage, patients leave home and start wandering. Many murders, suicides, self-mutilations and fire-setting episodes also occur in this stage. Since their problem is somehow to discharge the absolutely overwhelming amount of aggression, only an aggressive act of tremendous magnitude can suffice for this purpose. The choice of aggressive act depends on the relative strength of such factors as projection, inhibition and social sense. When there is little social sense or inhibition, the individual may institute an attack on the environment. Since murder is the greatest act of aggression that an individual can commit, murder is a frequent choice. However, incendiarism seems also to serve this purpose in some cases. Where the individual's social sense is stronger and his projective trends less, so that he cannot bring himself to make a major attack on the environment, he necessarily turns his aggression upon himself and may commit suicide. Of course, the patient does not ordinarily think consciously of murder or suicide as alternatives to a schizophrenic psychosis; nevertheless, the choice may sometimes be a conscious one, as is illustrated by the following cases.

A woman about to drown herself made this statement: "I can't stand living this way; I've been ill for 10 months and am afraid of being put in a strait jacket." (San Francisco *Chronicle*, May 29, 1949). In the case of a man who committed suicide, it was noted that immediately before his death he had been reading Sophocles' *Chorus of Ajax*, which contains the following passage:

> When reason's day sets rayless, joyless, quenched in cold de-

> cay, better to die and sleep the never-waking sleep, than linger on and dare to live when the soul's life is gone . . .

So much has been made in recent years of the suicide's wish to punish others by making them feel remorse for their bad treatment of him, that there has been a tendency to lose sight of the fact that in the final analysis it is himself whom he destroys, and not others. Close examination of the situation usually reveals that the key figures who are supposed to be punished by the suicide, are so indifferent to the patient's existence that his demise cannot possibly affect them sufficiently to justify the step on such grounds. It also seems certain that the schizophrenic or potential schizophrenic patient, with his alertness to unconscious factors, is aware of this. If he goes through with the suicide despite this realization, it may be because he feels that life without love is not worth living anyway. In fact, it is well recognized in mental hospital circles that one of the greatest hazards in caring for suicidal patients is the relatives, who often unconsciously facilitate the carrying out of the patient's suicidal intentions by insisting upon taking him out of the hospital too soon.

As a further illustration of what has just been said, we cite the case of a young woman schizophrenic patient who had previously been hospitalized, but who was ambulatory and free from delusions and hallucinations during the time she was being treated. She was at all times very suicidal and finally succeeded in killing herself. A few weeks before her death she had stated that she felt like doing away with herself because she saw no hope of any future improvement. Her parents received the news of her suicide with the utmost calm.

Joel Sayre gave a gripping account of a young man's suicide in The *New Yorker* of April 16th, 1949.[9] The man had climbed out of a hotel window on to a ledge one hundred and sixty feet above the ground, from which he threatened to jump. When police phoned his mother she responded that she was sick in bed and couldn't come to New York. The police asked if she had any ideas about how to get her son in off the ledge, but she had none. The father was away in the country and could not be reached. All efforts on the part of interested persons and the police to persuade the young man to come in off the ledge were of no avail. In the meantime thousands of people had gathered on the sidewalks below to watch the expected leap. Hours later the police again phoned the mother. She agreed to appeal to J. over the telephone, but he refused to talk to her. Almost exactly eleven hours after he had stepped out on to the ledge J. made his final death plunge. One is struck by this young man's indifference to his mother and his feeling that she was indifferent to him.

Striking evidence for our hypothesis about the defensive function of certain types of murder is to be found in Wilmanns' paper,[10] *Murder Committed During Prodromal Stage of Schizophrenia*, describing a series of cases in which it is clear that the murders were perpetrated in an attempt to get release from unbearable tension.

The first case is that of a student who, quite unprovoked, shot another 19-year-old student who was hardly known to him. When his father asked him what he had done he said, "I wanted to be a murderer." He felt no remorse. The act was something he felt compelled to do after years of "unbearable inner tension," in an attempt to regain inner freedom. The patient had previously wanted to end his life, burn himself with fire, shoot his eyes out, commit murder; in short, commit any act "from which there would be no return." After the act he felt "as if he awakened to reality" and recognized that he had not achieved "inner freedom." He was taken to a mental hospital where he fell into a stormy schizophrenic attack leading to complete personality disintegration. Thus, the attempted defense against schizophrenia failed, although it is noteworthy that even in this case the patient experienced a temporary return to reality.

In the second case a man shot both his brother and a friend. He at first tried to give a rational motive for his act, but when he became schizophrenic three months later he admitted that he could not understand why he had committed it. He said that he had been driven thereto not of his own will, but by a compulsive urge. He, too, had had the idea of securing relief from inner tension. A third case is that of a 21-year-old student who, in a similar attempt to free himself from tension and under the force of an external compulsion (he felt that something from outside came over him), cold-bloodedly planned and carried out the murder of his father and three sisters. He had long had the idea of doing something frightful, such as burning his eyes out, and patricide seemed to him the greatest crime. He came from a strict Roman Catholic family, but was filled with "hatred of everything good," "rage against God" and "pleasure in offending God," so that he masturbated excessively. Before he had made the decision to murder his father he suffered from headaches, sleeplessness and thought disturbance. After the act his affect was one of icy calm. He was even able to joke and smile. He wrote: "I cannot make myself feel any pangs of conscience when I have none." This patient was placed in an asylum, but unlike the others never became overtly psychotic.

Wilmanns also describes three women who murdered their children and then attempted suicide, but in each case they were unable to give any reason for the act.

Common factors in all these cases are the following: personality change which includes shyness, withdrawal and attacks of

melancholia is followed by a state of extreme tension; then either an "inner voice" or a feeling of external compulsion urges them to commit the act. The act itself is followed by lack of remorse and a state of calm. Wilmanns studied the histories of many schizophrenic murderers and found that they had long felt an irresistible urge to commit murder. All had suffered personality change earlier in life, but somewhat less than half were diagnosed as schizophrenics. The others served their sentences. This suggests that in almost half of these cases the resort to murder as a defense against psychosis achieved its end.

Wertham,[11] in his very interesting book Dark Legend, describes a case of matricide committed by a 17-year-old Italian boy, which shows all the essential features of Wilmanns' cases. Following his father's death, which occurred while he was in the pre-puberty period, Gino and his younger brother and sisters were ill-treated by the mother who beat and neglected to provide food for them, while she more or less prostituted herself with various men. His resentment of her behavior built up to such a point that one day, when he was about 12 years old, he made a vow that his right hand must be cut off at the wrist if he did not kill her some day. However, five years were to elapse between the oath and the actual killing, during which time the gradually mounting hatred was concealed by a friendly, out-going attitude. His hard work, excessively good behavior and puritan morals caused him to be much liked by the adults in the neighborhood. Only during the last month before the murder did any personality change become apparent. At this time he began coming late to work, having been unable to sleep at night, and was preoccupied and absent-minded, whereas he had formerly been punctual and very reliable. He was unable to eat. He also lost his cheerfulness and no longer liked to listen to the radio. The reason for this was that he was now completely obsessed with the need to commit the murder, for which he had long formulated definite plans. These had included getting his mother to sharpen the bread knife with which he later killed her. After the murder, in which he stabbed his mother 32 times, Gino, like Wilmanns' cases, experienced a state of calm and a complete absence of feelings of remorse. For the first time in months he was able to sleep well and he became again his friendly, charming self. His first thought after the murder was to buy some candy for his younger brother and sisters to keep them from crying. He justified the killing by the statement that his mother had "dishonored my family." Only after years of treatment in a mental hospital did he come to have some insight into the enormity of his act.

In Wertham's more recent book on the subject of murder, entitled The Show of Violence,[12] there are three more cases that fit our theory. Two of them involve young married women,

each of whom murdered her children. The first young woman had made the discovery that her husband was a homosexual, following which she became more and more preoccupied with the idea that her two children, as well as herself, must be abnormal. Unlike most of our cases, this woman was clearly psychotic before the act; she had developed ideas of reference in which she felt that everyone was looking at her in a queer way and that they all knew about her abnormality. She became increasingly depressed and panicky, and during the last few days she could neither eat nor sleep. Suddenly the solution came to her very clearly: "We three have to commit suicide." She made deliberate plans for this, intending to poison her children with acid, but when she discovered that the acid merely caused her little boy excruciating pain without killing him, she strangled them. She then attempted to kill herself by drinking the rest of the acid and jumping out the window.

The second young woman had an extremely unfortunate history. Her mother was a paranoid schizophrenic who was hospitalized much of the time. She herself had married young and her husband had died of heart disease, leaving her in desperately poor circumstances. She had gone to work and supported her children as best she could, giving them excellent care. The crisis came when she had a chance to marry again, but only on condition that the children were placed away from the home. According to the history, she approached a number of social agencies, all of which were adamant in their refusal to accede to her request. Her capacity to deal with this situation was somewhat limited by her dull normal intelligence. She became more and more desperate and less able to stand the clatter of the machines at work, or the noise of the children at home. Following a tonsillectomy she was at home in bed for several days and it was during this time that the idea of doing away with the children first came to her. She was scared and upset. She wanted to think about it and yet did not want to think about it. She was unable either to sleep or to eat and was very undernourished when seen by the psychiatrist. She planned the murder carefully, taking the children to a wooded section in a remote part of Long Island. She took along a hatchet, a carving knife and some gasoline. She killed the older child first, hitting her on the head with the hatchet, cutting her throat, then pouring gasoline on her and setting fire to her. She then hit the little boy on the head and cut his neck, but did not set fire to him. She was arrested when she went to the nursery school to announce that the children would not be coming any more. Both of these mothers were found to be sane following the act. The first mother was filled with regret, but the second mother displayed a characteristic attitude of indifference to her fate.

The third example is the famous case of the "mad sculptor,"

Robert Irwin, who made the headlines in 1937 for the murder of his former landlady, Mrs. Gedeon, her daughter Veronica, and the boarder, Byrnes. The two women were merely choked to death, but the innocent boarder, whom Irwin had never even seen before, received seven deep stab wounds. Actually his intention had been to murder Veronica's sister Ethel, with whom he had at one time thought himself to be in love, but when she failed to come home he murdered the other three. The life of this young man, who reached adulthood during the depression, had been one long struggle against poverty and artistic frustration. Prior to the murders he had lost one job and had just been disappointed in his hopes of getting another one. He walked to an East River pier, thinking to commit suicide, but then made up his mind to kill Ethel and go to the chair for it. Irwin was clearly insane before the act, having been in and out of mental hospitals a number of times, usually with the diagnosis of dementia praecox. Irwin had developed a system of delusions centering around the idea of "visualization." He believed that by practising the visualization of objects every day, just as one would exercise a muscle in order to develop it, he would finally develop his mental sight to such a pitch that he would have immediate access to any book he had ever read, or any play he had ever seen. He came to the conclusion that,

> Every organism, upon reaching maturity, sacrifices itself to the task of reproduction. In other words, the driving force in back of our lives which can be used for other purposes we sacrifice to the task of reproduction.

Thereupon, he developed a definite plan to cut off his penis in order to "bottle up his sexual energy" for higher purposes. He had frequent spells of anxiety and depression during which he thought of suicide or murder (the latter with the idea that he would be sent to the electric chair) as "one way out." Following one of these spells he made an actual attempt to cut off his penis and then presented himself at the psychiatric hospital, where he was first seen by Wertham. However, this was not his first hospitalization, since he had previously asked to be admitted to a psychiatric ward because of nervousness, inability to concentrate and suicidal thoughts. A striking feature of this case is Irwin's recognition of his need for psychiatric help and his persistence in trying to get it. He said of his state of mind prior to the murders, "That was the bluest and blackest moment of my life." He indignantly denied that he had raped any of the women. After the act he said of himself, "I was as calm as I've been in my life before."

Wertham considers all these cases, except that of the mother with the dull normal I. Q., to be examples of a new clinical

entity first described by him and called *catathymic crisis.* It involves the aberration of reasoning under the impact of emotional complexes leading to an outbreak of violence. Wertham evolved this new diagnosis, because the classical Kraepelinian definition of dementia praecox does not limit itself to a description of the mental condition, but includes a definite course leading to progressive withdrawal and deterioration of the personality; whereas he had noted that, after the crisis, his patients showed a return to sanity and thereafter remained in contact with the environment. However, it seems that what is required is not a new diagnosis, but rather recognition of the fact, long known to psychiatrists, that not all schizophrenics deteriorate; on the contrary, a certain percentage of them makes at least a social recovery. The idea that the diagnosis should be changed when the prognosis is changed is common, but none the less faulty reasoning. In Wertham's series of cases both the sculptor, Robert Irwin, and the first mother had clearly paranoid schizophrenic delusions before they committed the murders. That their delusions appeared to clear up afterward may be attributed to the beneficial effects of discharge of rage. The fact that Irwin was still a schizophrenic, although not psychotic after the act, is revealed by evidence of schizophrenic or autistic thinking of the type described by Zilboorg[13] in his paper on ambulatory schizophrenics (many of whom were also murderers). A peculiar feature of the crime had been his theft of a little alarm clock, which proved to be one of the principal bits of evidence connecting him with the murder. When questioned about it later he said: "Do you know, that's one thing I'm ashamed of. Stealing that clock. To kill is one thing, but to be a sneak thief . . . !" Gino also gives evidence of autistic thinking in the following statement about his mother: "I killed her, I took her life away, but no one can say I ever disobeyed her." That the murder was also an attempt to ward off insanity is clear from Gino's statement about his feelings on the evening of the murder: "I knew this was the time. I had in my mind that I have to stop it. I didn't want to go crazy." Wertham ruled out a diagnosis of schizophrenia in all these cases because they remained in excellent emotional contact with themselves and their environment, although the above statements rather belie the normality of their affect. However, the five stages of the catathymic crisis, as listed by Wertham, differ in no way from the stages through which Wilmanns'[14] schizophrenic murderers passed before and after the commission of their acts. There was the personality change and the extreme state of tension, the feeling that "something kept making me do it," followed by calm and a sensation of release. There was also a complete lack of remorse. Wertham's patients did not become psychotic after their murders, but neither did almost half of Wilmanns'

cases. It may be assumed that in these cases the defense against psychosis was successful.

The newspapers abound in excellent illustrations of our thesis that murder may be committed as a defense against schizophrenia. The first example is provided by the dramatic case of the mute girl, Nell Olive Hammack, who almost murdered her 62-year-old aunt with whom she had been staying for the past month. The aunt was bludgeoned at least a score of times with a claw hammer, a hearth poker and a candlestick. The brain was exposed in two places and one arm was broken. Despite this, the aunt survived. First news of the attempted killing appeared when the girl herself ran to the next door neighbor and shoved a scribbled note at him, saying that something had been done to her aunt by a man, and asking him to send for the police. Her muteness had begun at the age of 10 and apparently was considered to be of an hysterical origin. The aunt had invited the girl to stay with her so that she could help her, and had been insisting that she hear and speak normally. The mother said that the girl was deaf, but not mute. She refused to respond to spoken questions; she would respond only to written questions and then only in writing. When the question was put to her, "Have you always been deaf?" she wrote the confusing yet revealing answer: "Oh no, nothing wrong with my hearing . . . just in my mind" (San Francisco *Examiner*, April 20, 1949). The girl's story can be pieced together from her written notes: "There's nothing trouble before dinner," she wrote. "About . . . 3, I walk every hills. I just want fresh air. Then come home about 4:30. . . . Then Waldy looked very sad. I asked her what was the matter with her. We take rest for few minutes before 6. We are happy this time." But the aunt told her not to help with the housework, and that again made her sad, the girl continued. She wrote on: "She was very fast speak to me. I made her angry when I don't speak because I can't understand what she said. . . . Then I become very nervous. I know my mind become very troubled. . . . I become very angry at myself. My mind become poisoned. I do not know what to do. . . . I go play piano. My eyes like dreams, when my mind become different" (San Francisco *Examiner*, April 20, 1949). The girl also said that before the deed she had felt sick, had pains in her head and felt very nervous inside. She wrote the following very significant statement: "All my life, since unable to hear, I try to tell my any family, go to stay in hospital for mind be so dangerous. I still know as I am become dangerous to life. But no one knows that" (San Francisco *Examiner*, April 21, 1949). The girl's demeanor during her hearing is described as follows: "She was pale and unemotional, and stared unseeingly ahead of her most of the time" (San Francisco *Examiner*, April 21, 1949). She was found to be not insane, but not normal, and in need of

psychiatric care. There was no evidence of delusions or hallucinations.

Another example is that of the 34-year-old murderer, Gulbrandsen, who bludgeoned two men to death in a cabin in the Valley of the Moon. Next morning he persuaded a friend of one of the men, a young married woman, to come with him to the cabin under the pretext that the man had broken his arm. He entered behind her, slugged her over the head with the same Indian stone pestle he had used to slug the men, than raped her and afterwards tied her to a tree. She managed to free herself and go for help. Gulbrandsen was unable to sleep that night and began to think of giving himself up. According to the San Francisco *Examiner*, July 6, 1949, he surrendered the following day "because the consensus of opinion was that I was a dangerous character" (a typical schizophrenic *non sequitur!*). An interesting feature of the case is that, like Irwin before him, he indignantly denied the rape charge. At the time of the murders he had only been out of jail a few weeks following imprisonment for an assault committed two years previously. On this occasion he had been involved in a drinking party, during which he had stabbed a friend 44 times with an ice pick and then attempted to "possess" a young married woman who was present. He tore off her skirts but actually made no further efforts to molest her. In regard to the present offense he made the following statement: "Until Monday morning everything went fine until I awoke feeling rapid pulsation and pounding heartbeat. . . . I went outside, took a stone which was part of an Indian pestle, came back into the cabin, hit Flint and Jensen. . . . I felt no compassion at the time but was in somewhat of a stupor. I feel the greatest revulsion at this time but can still speak objectively" (San Francisco *Examiner*, July 6, 1949). Gulbrandsen surrendered by offering to tell his story to the reporter of a local newspaper. The latter described him as quite jovial during the dinner they ate together. He said he thought he should have been sent to a mental institution after his previous assault charge, instead of to a prison. As a result of the present charge he was seen by a psychiatrist who expressed the opinion that he was not obviously insane.

One can find examples of schizophrenic murderers in literature. Dostoevsky,[15] with his amazing insight into disorders of the mind, has painted a character who fits our theory in most respects. Raskolnikov, in Crime and Punishment, showed all the prodromal symptoms of a schizophrenic breakdown prior to commission of the act of murder: he had given up all attempts to work and earn money. He avoided his former comrades and saw no one. He had ceased to care about his appearance to the extent that his clothes were ragged and dirty and, in fact, he often slept in them. He ate almost nothing for days at a time

and had become extremely emaciated. He was in a constant state of near-panic. States of indecision, inhibition and almost total inertia, during which he just lay on his bed lost in his own thoughts, alternated with states of hyperactivity and impulsivity. Shortly before the murder he was in a sort of feverish twilight condition in which at times he became confused and lost track of his whereabouts. He was assailed by frightening dreams. He began to develop megalomaniac ideas of being above and beyond the reach of moral laws which restricted the actions of ordinary men. At this time the idea of killing the old money-lender, Alyona Ivanovna, suddenly came to him. For this, in the manner so typical of these cases, he made very deliberate preparations. However, after the murders, not only did he fail to achieve calm, but, on the contrary, his anxiety was increased to the point of utter panic and confusion. He felt that he was mad, that he had lost all power of reasoning and was completely incapable of protecting himself from discovery. This outcome is atypical, as such murderers usually experience a greater or less degree of relief from tension following their crime.

A modern writer, Robert M. Coates,[16] has given us an excellent psychological study of a schizophrenic murderer in his gripping novel, Wisteria Cottage. It describes a rather withdrawn, tense, moody and somewhat queer young man who murders a widow, her daughter and a young neighbor boy in a lonely seaside cottage. The women had befriended him, but he was filled with hatred against them, especially the mother; in his distorted mind they gradually came to represent personifications of evil that must be destroyed. Coates faithfully reflects the ferocity which so frequently characterizes such schizophrenic murders, and likewise the feeling of calm and release which typically follows the act.

History, too, gives us many examples of potential schizophrenics who became murderers instead of psychotics. We will cite only the most recent example—Adolf Hitler. His writings are full of megalomaniac and other delusional ideas, but apparently it was possible for him, by continuously discharging hate through mass murders, to avoid an actual psychotic break.

DISCUSSION

The cases described in this paper are all characterized by certain common factors which appear to support our hypothesis that they represent attempts to ward off a schizophrenic psychosis by an act of murder or suicide. In the first place, they all suffered from a state of *extreme mental turmoil* such as is frequently prodromal of a schizophrenic breakdown. They were all panicky and depressed, unable either to eat or sleep, and obsessed with the need to find "a way out." A few were already

actively deluded, but more frequently there was a fear of becoming insane. Some, like Irwin and Nell Olive Hammack, had made strenuous but pathetically unsuccessful attempts to be hospitalized, in order to be protected against their own murderous impulses. Gulbrandsen, too, expressed the opinion that he should have been placed in a mental hospital.

That the primary purpose of the murders was discharge of pent-up hostility is indicated by the fact that a majority of them were characterized by *unnecessary ferocity*, which went far beyond what would be required merely to kill a person. The bloodiness of the murders, involving innumerable blows or stab-wounds, is outstanding. In fact, this feature is so striking that whenever an assault is characterized by unnecessary ferocity it would seem that the authorities would be well-advised to raise the question of severe mental illness. It is a grave responsibility to permit such persons to be at large after merely serving a jail sentence of longer or shorter duration.

Another feature which indicates that these crimes were primarily serving an internal need to discharge hostility, is *the senselessness of the murders*—most of them served no external goal. Most frequently the victims were persons who had never done the murderer any particular harm and, in some cases, they were entirely unknown to him. They became victims as a result of the mechanism of displacement of hostility from the real object, who for various reasons may not be consciously known and recognized as such by the murderer. The choice of victims seems largely to have been determined by the caprice of circumstances, or by some secondary association.

With very few exceptions the murderers were reported to have been *strikingly calm* after their acts. In almost no case was there any expression of remorse. These are further indications that the primary purpose of the act was discharge of hostility regardless of whom the victim might be. The fact that the subjects were so calm after the event indicates that the act of murder afforded them real release from tension. Murders committed for an external purpose are not followed by a state of calm; on the contrary, anxiety is increased by the fear of discovery. That so many of these patients were found not to be obviously insane (in fact, some who were clearly schizophrenic beforehand were found to be sane after the murder), is evidence that the discharge of hostility afforded the ego relief from the threat of being overwhelmed by the id.

These cases reveal some further interesting features. One of them is the indignant denial of the accusation of rape by Irwin and Gulbrandsen. Gino expressed disgust at the idea of sexual relationships with women. One gains the impression that sex is actually repulsive to such men. In fact, there may be an underlying basic hatred of the opposite sex, since some of

the women also gave indications of such an attitude. One of the mothers described by Wertham was married to a homosexual (such choices are always unconsciously conditioned), and our own patient who committed suicide had expressed disgust at the thought of sexual relations. A second interesting feature is the narcissistic exhibitionism which accompanied the surrender in a few of the cases. Irwin contracted to sell his story to the Hearst papers for $5,000, and Gulbrandsen also offered to tell his story to a reporter.

It seems clear that many lesser acts of violence, particularly attempts at self-mutilation, have the same goal of trying to provide an outlet for the overwhelming hostility. Many of the above cases have a previous history of fantasies or actual acts of self-mutilation, c. f., Irwin. Operations and physical illness may have the same purpose. One of our patients, an ambulatory schizophrenic who had never required hospitalization, committed murder *unconsciously*. Apparently accidental behavior on his part had resulted in the loss of several lives. During treatment it became clear that this behavior represented the displacement and acting out of fantasies of murdering his parents.

Occasionally neurosis, particularly compulsive-obsessive neuroses, appears to perform the function of protecting the patient alike from the danger of psychosis and the need to commit murder. For example, a patient suffered from the fear of becoming insane and that, while insane, she might murder her husband or her children. At such times she had a compulsion to hide the knives from herself and she also increased her protective care of her family.

SUMMARY

An hypothesis is presented in regard to the dynamics of schizophrenia, in which it is postulated that "unassuagable anger," deriving from early infantile frustrations, is an important etiological factor leading to the outbreak of psychosis. Inasmuch as murder and suicide have in common with schizophrenia the factor of unassuagable anger, they may on occasion serve as alternate channels of discharge and thereby preserve the ego from the disintegrating effects of undischarged rage as manifested in a schizophrenic psychosis. This hypothesis was evolved in an effort to explain certain bizarre types of murders and suicides in which no adequate or comprehensible motive can be detected. Sometimes lesser acts of violence, such as incendiarism, self-mutilation, or even operations and physical illness may serve the same purpose. Data from the literature and from newspapers are adduced in support of this hypothesis.

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CAUSE, PURPOSE AND MEANING IN PSYCHOSOMATIC MEDICINE

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It seems to be an important feature of every culture that some of their pre-scientific concepts are tacitly taken for granted and remain exempt from the process of gradual restatement and readjustment to changing conditions. Our concepts of mind and body and their assumed interaction belong in this category. They go back to man's first faltering attempts to understand the facts of life. It is little wonder, therefore, that their continued use in modern times has failed to stand the test of cold scientific scrutiny. Yet notwithstanding their origin from primitive, prescientific thinking, they are still part and parcel of our approach to virtually all disciplines dealing with the nature of man.

Contemporary medicine and behaviorist psychology have sought to overcome the traditional dualism of our system of thought and to replace it by a more or less consistent mechanistic or materialistic approach. However, there is no field of medical research which shows more clearly the limitations of arbitrary philosophical generalizations than the field of psychosomatic medicine.

The young physician, brought up in the materialistic or monistic tradition of the turn of the century, may easily be led into thinking of disease, mental or physical, in terms of nothing but cause and effect. Yet in his daily practice, when dealing with people and their problems, he is compelled to make due allowance for their goals and motivations—that is to think in terms of a non-mechanistic teleological series that does not easily fit in with his mechanistic frame of reference. He may feel that he has overcome the dualistic fallacy of bygone days implied in the distinction between organic and functional, but he may find to his surprise that, while banishing it from clinic and research laboratory, it is still there in his waiting room, demanding appropriate action. This is obviously due to the latent dichotomy, inherent in the modern psychosomatic approach—although by tacit agreement, as it were, we are in the habit of disregarding or glossing over its existence.

Franz Alexander in his recent book *Psychosomatic Medicine*[2] rightly speaks of the dual personality of the old-time medical practitioner. Alexander seeks to overcome this personality split by resorting to what the history of philosophy is wont to describe as the double aspect theory of the mind-body relationship, that is, the doctrine that the two are head and tail of the

same penny, as it were, the one accessible to investigation from the outside, by physical methods, the other revealing itself to our inner subjective experience only and therefore requiring inquiry from the psychological angle.

Does this formulation do away with the basic dichotomy of two conflicting methods of investigation? Alexander himself condemns mere lip service to a truly holistic, all-encompassing approach to our problem. But the careful study of recent contributions to psychosomatic medicine reveals that whatever be the philosophical orientation of the respective worker, he cannot escape the dilemma of dealing with his subject in terms of either a mechanistic or a teleological series. Gardner Murphy in his *Historical Introduction to Modern Psychology*[1] sums up this state of affairs when he writes: "One might expect from such studies a renewed effort at some sort of rational formulation of functional mind-body interdependence, if not some high-flying philosophical solution of the mind-body problem. Actually however, no such happy consummation can be noticed." In view of all the intellectual effort devoted to this issue by generations of philosophers, Murphy finds it "a bit sad that neither the psychologist nor the psychiatrist has taken time off to take note of what has been said."

The considerations that follow do not aim at offering a new approach to an age-old problem. They are intended to show that merely dropping the hyphen in psychosomatic medicine is only likely to conceal it instead of bringing its solution any closer. Apparently it is the very subject matter of psychosomatic medicine—and of every discipline dealing with human behavior—that calls for a dual approach. The question is: Are we falling victim to the ancient dualistic fallacy in answering this call, or is the continued application of two seemingly conflicting frames of reference operationally justified and even necessary?

Teleological versus Mechanistic Series

The mechanistic frame of reference implies a series of molecular events linked together according to the laws of cause and effect. Knowing all the causal factors involved in a given situation, we can predict its future outcome. By influencing one or more variables within an isolated system we can gain control over it. Further, a mechanistic series is usually amenable to quantitative treatment and therefore deemed particularly suitable for scientific investigation. Indeed, it has been stated that all attempts at understanding and controlling the universe should be considered truly scientific only insofar as they can be dealt with in mathematical terms. On the whole, the same view has been guiding modern scientific psychology from Fechner, Wundt and Titschener to Pavlov, Watson and Thorndike.

To this strictly scientific orientation an inquiry into *purpose* instead of into *cause* is anathema. E. Brunswick, in his article "Points of View," in the *Encyclopedia of Psychology*,[3] considers references to a "wish" or "purpose" in terms of a terminal focus "a question of terminology, at best admissible in conversational language." He qualifies this statement by adding that "most theories of psychoanalysis are of this type, not to speak of such entire disciplines as economics, in which automobiles are considered to run because there is a demand for transportation . . . rather than because they contain cylinders, gasoline, wheels, etc., in proper arrangement." C. Kluckhohn and H. A. Murray in their recent anthology *Personality*,[4] have pointed out that we must seek to explain human behavior by a "present push" rather than by a "pull from a nonexistent future." It is true that these authors, by the formulation of "serial goal images" providing a semblance of the repudiated teleological motivation, try to overcome the difficulty implied by the two conflicting frames of reference. Earlier attempts have sought to circumvent this difficulty by resorting to the so-called double aspect theory or the concept of psychophysical neutrality or identity of the mind-body relationship.

An extreme case of a teleological series is the concept of a purposeful universe as conceived by the ancient Aristotelian and medieval theological philosophers. Both inorganic and organic nature, including man, are considered parts of an all-encompassing intelligent design. Leibnitz's doctrine of pre-established harmony and modern vitalistic and neovitalistic concepts of evolution as expounded by Henri Bergson or by Hans Driesch, are restatements of the same philosophy in more up-to-date terms. However, the advent of the new scientific thinking initiated by Bacon, Newton and Galileo gradually undermined the position of the teleologists, and Darwin's mechanistic concept of the evolutionary process gave it the *coup de grace*. The modern behavioristic approach is nothing but the consistent application of this philosophy to human conduct.

More recently Norbert Wiener and his associates have introduced the new concept of teleological mechanisms[5] into the controversy. This concept is applicable both to such self-regulating and self-orienting systems as man-made computing machines, guided missiles and other electronic devices and to the behavior of living organisms, including human personality. L. K. Frank has rightly pointed out[5] that the concept of teleological mechanisms is by no means "a regressive movement to an earlier stage in the history of ideas" but provides "more fruitful conceptions and more effective methodologies for studying self-regulating processes" in the universe at large.

Clinical medicine, aspiring as it does for the status of an

exact scientific discipline, may derive some comfort from this formulation.

I hinted that, despite methodical training in applying mechanistic concepts to the study of human nature, neither the general practitioner nor the psychiatrist of our day has ceased to view the reactions of his patients in terms of motivations and purpose. Not even the orthodox psychoanalytic doctrine, leaning as it does on 19th century mechanistic ideas, has been consistent in confining its inquiry into such etiological factors as early frustrations or traumatic experiences. Analyzing the patient's behavior in the transference situation, his ego defenses, the secondary gains he may derive from his symptoms, is nothing but a return to the repudiated teleological line of thinking. Indeed, Adler's[6] chief quarrel with Freud[7] was the former's greater emphasis on the *purpose* of an existing disorder as against its interpretation in terms of *cause* and *effect*. In any case, Adler's individual psychology has been chiefly concerned with the apparent purpose of a neurotic symptom as seen against the background of the patient's style of life. Otto Rank has developed his method of will therapy[8] along similar lines. Likewise, Wilhelm Reich's technic of character analysis[9] made important concessions to the teleological approach when emphasizing the part played by a person's character defenses. C. G. Jung, devoting a special philosophical study to the conflict between causal and teleological inquiry in psychoanalysis,[10] arrived at the conclusion that both have to be considered legitimate methods of psychotherapeutic practice.

Psychosomatic Dichotomy, Real or Apparent

The theories of modern dynamic psychiatry have thus paid considerable attention to the problem of a finalistic versus a causal aspect of human behavior. But while in the field proper of psychosomatic medicine this dichotomy is brought into still sharper perspective, the literature of psychosomatic medicine has largely disregarded its existence.

Four simple examples may illustrate the problem: A patient develops diarrhea, fever and a fleeting erythematous rash on his abdomen. Bacteriological and serological studies reveal B. typhosum as the etiological organism. Thus the cause of his disease is ascertained and the course of therapeutic action is determined. At night the patient becomes delirious and seems to be engaged in some purposeful activity such as picking breadcrumbs from his bed sheet. Obviously, in this case the etiological inquiry deserves our principal attention and the question of purpose of his delirious behavior is negligible.

Another patient develops a common cold due to virus infection. Here, too, our therapeutic action is determined by the

existing etiology. Yet closer examination may reveal that he has been in the habit of contracting common colds whenever he was faced with threatening life situations. This arouses the suspicion of a partly "diplomatic" nature of his illness and may give an important clue as to his treatment.

A third patient, a divorced woman of 28, became violently ill and vomited after excessive alcohol consumption. Her condition appeared so serious to the referring physician that she was admitted to a surgical ward. Psychosomatic investigation showed that her illness was of functional origin. In addition to being due to alcoholic indulgence, it followed an attempt on the same night by her estranged husband to resume marital relations with her. Unable to cope with sex on a mature level, her gastrointestinal symptoms expressed her aggressive tendencies toward her husband and her disgust at his sexual practices. At the same time they were an effective means to keep him at arm's length from her. This, at bottom, teleological interpretation gave a satisfactory account of the psychodynamics of her reaction. When the interpretation was offered to the patient the presenting symptom disappeared.

Personality study in a fourth patient, a man 52 years of age who suffered from bronchial asthma, revealed significant psychological factors involved in his condition. His attacks could well be considered equivalents of crying in a person whose life history had been nothing but a series of continued frustrations. Skin tests revealed no significant allergies; his asthma had been long standing. There were fibrotic changes in the lungs and evidence of cardiovascular sclerosis. Psychotherapy was ineffective in this patient. He responded to aminophyllin injections given during the attack.

In all these cases inquiry into the cause of the existing pathology certainly is of primary importance. But the finding of B. typhosum in the first patient is obviously of greater significance than the part played by alcoholic indulgence in our third patient. In any case, the proper understanding of the psychodynamics of her symptom—of its purpose and meaning—gave the key to her therapeutic management. Again, in view of the structural changes that have developed in the fourth patient, the limitations of a one-sided psychological approach were obvious.

These four examples, commonplace though they are, show that giving mere lip service to the dual aspect presented by all psychosomatic pathology is not enough; a flexible, double-barrelled diagnostic and therapeutic approach is required. It calls for a therapist capable of switching his focus of attention any time from a mechanistic to a teleological frame of reference, and vice versa, always on guard against being caught in the one to the exclusion of the other. But he must also realize that

through the simple fact of his participation in the doctor-patient relationship he may himself become involved in a teleological system. Whatever he may do or say in this relationship has a double impact upon the patient: it affects him in terms of cause and effect, and at the same time calls forth a psychological response determined by their mutual needs and motivations. It is this aspect of the doctor-patient relationship which psychoanalysis is wont to consider under the heading of transference and counter-transference.

However, it goes without saying that due attention should be paid to the unconscious needs and motivations of both doctor and patient outside the psychoanalytic situation. For obvious reasons this is frequently overlooked in clinical work, psychosomatic or otherwise. Yet the clinician would do well to realize that such an apparently insignificant and purely subjective detail as his scientific interests prevailing over his therapeutic motivations (e. g., when engaged in a research project) may make all the difference between therapeutic failure and success.

The same considerations are true for such wildly divergent motivations (or rather motivational systems) as exist in the primitive medicine man; in the religiously inspired lay practitioner; in members of the medical profession in a liberal individualistic society or in the physician working under conditions of a state-controlled and salaried medical service. Here, too, the mechanistic contention that the same drug dispensed by the same physician, or the same method of free association applied by the same therapist, must of necessity be followed by the identical therapeutic effect simply does not give justice to the fact. The doctor-patient relationship does not work within a closed system and has to be viewed against the cultural and socio-economic background of those involved.

Meaning, Language, and Organ Language in Psychosomatic Medicine

Psychosomatic medicine, embracing as it does the total personality of the patient within his social context, cannot avoid coming to grips with the concept of *meaning*. Meaning is in fact implied by any inquiry into motivation and purpose.

A chess player's moves may be fully accounted for in behaviorist or mechanistic terms by a "present push," in conjunction with the effect of "serial goal images" determining his actions. But to the observer familiar with the game, each of his moves at the same time assumes symbolic significance. Likewise, a person's verbal behavior may only be due to an intricate series of neuromuscular reflexes but at the same time it conveys meaning to another person. The same is true for a sign or symptom in psychosomatic medicine even though it

developed without any conscious intention on the part of the patient. In the case of our patient suffering from typhoid fever his increased temperature is exclusively part of a mechanistic series, and to a lesser degree his picking imaginary crumbs from the bedsheet, since this is also amenable to a *quasi* teleological, and to that extent psychological, interpretation. Again, the physician of our conversion hysteric who failed to understand the meaning and purpose of her vomiting entirely missed the point when viewing her case within an exclusively mechanistic frame of reference.

Franz Alexander[2] has pointed out that the closer the relationship of the affected structures to the voluntary nervous system, that is to the cerebral cortex, the more explicit their symbolic, meaningful nature. The hysteric conversion symptom is a classical case in point.

The same principle is illustrated by certain organic lesions to the right cortico-thalamic region in right-handed individuals, conducive to left-sided hemiplegia and so-called imperception of defect or anosognosia. A patient of mine was admitted to the Vienna Neurologische Klinik suffering from cerebral hemorrhage and left sided hemiplegia.[11] He was unconscious; his eyes, head, neck and trunk were turned to the right side so violently that he had to be guarded from rolling out of bed. In the course of two to three days the motor deviation, involving a bodily attitude of "aversion" from his left side, subsided and the patient regained consciousness. At this point the symptom was replaced by a striking emotional attitude of aversion which he assumed toward his left side. He looked at it with horror and disgust, stated that his left arm and leg did not belong to him, that they were ugly and repulsive and he wanted them to be removed and thrown on the garbage heap. Similar observations have been described by a number of investigators. They are examples of what could be termed *organic conversion hysteria* in which structural damage to areas concerned with emotional expression may be conducive to symptoms closely resembling the symptomatology of hysteric repression, distortion or scotomization.

Franz Alexander has shown that, in contrast to structural damage to the central nervous system, no such symbolic meaning is attached to the group of disturbances involving the autonomous nervous system and the internal vegetative organs. A sclerotic kidney associated with prolonged hypertension does not express hostility, although it may be possible to trace its origin to the effect of long-standing emotional disturbances of this nature. On the other side of the scale are structural lesions of the body, or physical changes in the universe at large, in which interpretation in terms of meaning or purpose seems to be entirely ruled out of the question. This may apply in the same

way to such widely divergent happenings as the fracture of a bone and the falling of rocks on the mountain side—although it is true that in the former case the element of accident proneness with all its implications enters the picture, to say nothing of the wary mountaineer who may be led to mistake a haphazard configuration of stones for a meaningful trail marking showing the way to the nearest shelter. Obviously, in this instance the sole criterion in deciding whether or not meaning is attached to his ambiguous signpost is by finding out whether it was made by human hands.

Much of the same considerations apply when we are dealing with such manifestations as language, organ-language or the psychosomatic symptom. Accidental pressure applied to the chest of a dead body laid out in the morgue may result in air passing through its larynx. Yet only in the living are we justified in describing this physical event as a sigh of anguish or despair. More pertinent is the interpretation of an epileptic seizure in terms of violent abreaction on an unconscious level.

In fact, when we are confronted with "behavior" in its broadest sense the psychological interpretation seems to be inescapable. Obviously, it is a natural consequence of the human situation that the functional state of a person's organs and organ systems conveys messages to his fellow. His motor, vasomotor and glandular reactions, voluntary and involuntary, assume the significance of expressive movements arousing fear, disgust, sympathy and sexual excitement, as the case may be. The function of his speech muscles has specialized in this direction. They are generally considered as *the* organs of expression and communication. But the fact is that the functional state of other organs may serve the same purpose even though in a very imperfect way. The whimper of the hungry infant is a case in point. Again, the bedwetting problem child, protesting against the lack of parental affection, is an example of conveying meaning obscured by its unintentional and equivocal nature. There were indications in the analysis of our hysteric patient that on a deeper level her vomiting expressed both her fear of being, and her desire to be, pregnant.

Language and organ language, as studied by psychosomatic medicine, have one thing in common: they convey meaning "to whom it may concern," the former to one's fellow men, to one's social environment; the latter to the medical psychologist who possesses the key to its translation into ordinary language. The language of the organs is largely symbolic like the language of the dream. Its syntax is rudimentary, its logic confused and self-contradictory. But it is derived from powerful drives, it expresses needs that urgently call for gratification and it may do so with the obstinacy of the infant crying for his bottle.

It is obviously this close relationship of disturbed organ

function to repetitive expressive movements (and the attending need to be understood by one's fellows) which accounts for the therapeutic effect of psychoanalytic interpretation in these patients. Once the patient is satisfied that the message contained in his expressive movements (or the language of a functionally diseased organ) has reached a sympathetic ear he is less in need of the tedious reiteration of his message-called symptom. But making his private plight public, as it were, solves only part of his problem. Like the reception of the SOS sent out by a shipwrecked sailor it may relieve anxiety but does not guarantee a successful rescue operation. This is why the assumed cathartic effect of interpretation so often falls short of its objective. The hungry infant may be reassured by the sight of his mother coming to his crib but he will still insist on being fed. More often than not insight satisfies more the therapist's than the patient's emotional needs.

Meaning conveyed by a symptom, organ language or language may be of a composite, hierarchical order. Verbal behavior, besides its intentional, semantic significance, may reveal deeper layers of the speaker's personality through a slip of his tongue. The same is true for the stammerer's struggle for self-expression. We mentioned that vomiting may express disgust, the wish to be pregnant or both.

The psychosomatic symptom is thus only a special instance of *meaningful behavior*. Besides having a cause it may also assume symbolic significance and serve the purpose of self-expression. In this respect it has to be viewed, as every neurotic symptom, against the background of the patient's total situation: socio-economic, cultural and anthropological. It is at this point that psychosomatic medicine forms a bridge between the natural and the social sciences. At the same time it opens up the vista of a world of values usually considered out of bounds to the scientific method.

CONCLUSIONS

Psychosomatic medicine can be described in terms of a three-dimensional approach to human behavior in health and disease: It is concerned with etiological, teleological and semantic aspects of normal and pathological functioning.

These three frames of reference are closely inter-related and discriminating between them may not be altogether justifiable from the philosophical point of view. But the clinician faced with a specific symptom must be aware of three alternative ways of understanding it better and its therapeutic management. He may focus his attention on underlying causes and decide for treatment guided chiefly by etiological considerations, i. e., along mechanistic lines. Alternatively, he may try to understand

the symptom as a result of goal-seeking behavior characteristic of man. Accordingly his therapeutic approach will aim at a psychodynamic study of his patient's motivations, conscious and unconscious. In this case the existing disorder may only become intelligible as an expression of meaning.

It will be noted that such a three-dimensional approach is concerned neither with the organic nor functional nature of an existing disease. It cuts across the artificial boundary lines ostensibly separating the two. Nor is it committed to an *exclusively* mechanistic or teleological or semantic frame of reference. It may be guided by either mechanistic or teleological or semantic principles, depending on the purely pragmatic consideration as to *which* of the three available avenues of approach is most likely to yield the desired therapeutic results. Indeed, deciding this question in a concrete case is the principal task of psychosomatic diagnosis, and full freedom of the therapist to operate with equal ease within either of these seemingly heterogenous frames of reference should be its chief therapeutic objective.

It goes without saying that the existence of these conflicting concepts within modern psychosomatic medicine is an unsatisfactory state of affairs. Yet, merely glossing over or disregarding the problem would obviously be still more unsatisfactory. The classical Spinozistic doctrine that mind and body are nothing but two separate manifestations of the identical substance may be as good an answer to our quest for a unified world picture as can be found at the present stage of our knowledge. But this basic philosophic conviction must not obscure the fact that only the judicious application of both the mechanistic and teleological approach can give justice to the complexities of the human situation in both health and disease.

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THE PLACE OF JUDGMENT IN CLINICAL RESEARCH*

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Research in the behavior disorders and in evaluating the methods of treating personality deviations is largely ineffective because of lack of a reliable and valid criterion against which adjustment may be evaluated or improvement gauged. While clinical psychologists and psychiatrists can frequently "sense" or "feel" that their patient has become "better adjusted" or that a new patient is "very disturbed," the complexity of factors which enter into these evaluations is not easily untangled. Nor do the same "objective" factors have similar import in the changed context of the life-space of different individuals. Expression of hostility, for example, may appear to be a healthy sign in one patient and pathognomonic in another. The clinical evaluations made by persons working with patients is, as a rule, quite different from their research methods. In clinical evaluation, reliance is placed, sometimes consciously and sometimes not, on estimates of adjustment and of change in adjustment which may be variously termed global, insightful, intuitive. This does not mean of course that there is anything mystical or magical about the evaluations, but rather that they are a consequent of multiple signs, clues, emotional reactions, objective observations, etc., which are not, and perhaps cannot be, isolated for substitution into single variable research designs. Research methods in the clinic continue, however, to be based on either the analytic, single variable designs found in more "rigorous" branches of psychology, or on naive and unsophisticated reports of "improvement" in the form of illustrative cases or reports of "per cent improved" with no statement of the nature of the evaluations.

Some clinical psychologists turned to the projective technics as a solution to their dilemma. Here was an approach which purported to give somewhat objective assays of personality but which depended upon interrelated factors which were meaningful only in the context of the record as a whole. The logical and face validity of projective methods provided a defense

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against the criticism of their more academic colleagues. But now that the first flush of enthusiasm for projective methods shows signs of being replaced by more rational appraisal, there appears to be a need for more careful and rigorous validation of these methods.

It is the thesis of the writers that the advantages inherent in insightful clinical evaluation, and perhaps also in the skilled use of projective technics, need not be sacrificed because of the lack of definition of specific elements entering into their use. Objective (although not necessarily analytic) methods are available which may be used to determine the reliability and validity of these clinical technics. Methods of measuring consistency of judgment and of empirically checking its validity are not new to psychology. Indeed judgment, in one guise or another, has a long and respected history. Research in experimental esthetics and in psychophysics has provided methodology which may prove applicable in the clinic and mental hospital.

Judgment provides the basis for, or is an essential part of, much of scientific progress. Kelley,[3] in discussing a scientific approach aimed at discovering principles and laws underlying observable phenomena, states that: "There is a quadruple alliance inherent in sound statistical research: phenomena, i. e., data; logic, i. e., mathematics; human psychology in its power to judge sameness; and human psychology in its power to appraise relevance. If this total activity is to be at its best, the data must be germinal, the mathematical elaboration sound and penetrating, the judgment of sameness made with reference to things that the mind has primarily faculties for sensing, and the judgment of relevance made in the light of an imagination so rich that few possibilities and connections are overlooked."

Wheeler's[4] discussion of the levels of prediction in science includes a first stage in which one can predict that an event will or will not occur; a second stage, which involves prediction based on judgments of "more than" and "less than"; and a third stage which involves accurate and precise specification. The majority of predictions in psychology belong to stage two.

In approaching the problem of utilizing clinical judgment in research it is apparent that selection of "germinal" data is essential if the judgments are to be reliable and valid in prediction. Behavior samples which are overly complex and multiordinal will lead to unreliability; overly simple factors, while leading to consistent judgment, will not be valid when meaningful predictions are the criteria of validity.

An unpretentious example of the use of judgment in estimating the reliability and validity of a clinical technic has been reported by the authors[1] elsewhere. In brief, the study consisted of selecting ten cases from the files of a Veterans Administration Mental Hygiene Clinic which represented, in the consensus of

three judges, a continuum of adjustment ranging from a normal subject to an hallucinated, delusional psychotic. After the ten cases were selected their drawings-of-a-man-and-woman, obtained previously, were reproduced in order to be presented in the form of paired comparisons. Fifteen clinical psychologists serving as judges were asked to indicate for each pair which patient's drawing reflected the better adjustment. The reliability of judgment for the group of judges was .97 and the validity, as measured by the rank order correlation of the judges' rank of the drawings with the original rank of the cases was .65.

As a further validity estimate a second study[2] was undertaken in which similar drawings from three groups, normal, neurotic and schizophrenic, were compared with a criterion scale composed of the original ten drawings for which mean scale values were now available. Judges were asked to estimate where along the criterion scale (assuming it to represent a continuum) each drawing should be placed on the basis of inferred adjustment. Reliability for the new group of judges was .89 and validity, measured by critical ratios between the mean scale values of the three groups, was encouragingly high. The approach, with all its crudities, succeeded in differentiating the two psychiatric groups from the normal group at levels beyond one per cent.

Many other problems suggest themselves. Use of judges in evaluating various forms of behavior samples will rather effectively determine what sorts of samples are "critical" in the sense of permitting reliable judgments, and also what sorts of behavior samples are likely to lead to valid predictions of future behavior.

It would seem, for example, that a critical test of the validity of many of the projective methods could be effected, using objective methods but retaining all of the advantages accruing to insightful interpretation. A current investigation of the authors may be used as an illustration. Ten subjects have been selected who are of comparable intellectual, educational, and sociocultural level, but who appear to vary rather markedly in their level of general adjustment. (Guide-posts used were psychosexual maturity, ability to get along with people and ability to perceive reality in ways shared by their confréres.) Rorschachs were obtained from the ten subjects. Then each subject's responses to each Rorschach card were paired with each other subject's responses to the card in the conventional paired-comparisons design. Trained clinicians serving as judges are being asked to decide, for each pair, which patient's responses (for that particular card) represent the better adjustment. This will result in the ten subjects being placed along a continuum on card I, card II, etc. Appropriate measures of the

reliability of judgment for each clinician and for the group of judges will be possible. Each card will eventually have a ten-point continuum of mean scale-values, the spread of which, of course, will depend on the reliability of judgment. It will then be possible to add each subject's ten scale-values to obtain a total adjustment score. By this procedure it will be possible to achieve a single Rorschach adjustment score without sacrificing the value of insightful evaluation. The validity of this set of scales may be examined by finding whether groups of comparable subjects which vary in level of adjustment are successfully differentiated by having the subjects composing them matched card by card with the criterion scales.

To those who point out that this approach is not "global" in the sense that it is not the whole record, but rather just individual cards, which is being judged, we can only agree. But it seems that if not global, the approach is hemispheric, and to be preferred to studies of "objective signs." Most Rorschach workers, when evaluating adjustment from a protocol, certainly compare it with their memory of other records from comparable subjects and judge where it falls in relation to the others. The present method attempts to objectify this procedure while sacrificing as little as possible of any technics the clinician may use.

In general, it is our thesis that in the context of our present state of methodological development, and in the absence of any absolute criteria for the evaluation of human behavior, we must recognize the place of judgment in problems met in the clinic and mental hospital and continue to check our judgments for consistency and efficacy in prediction. The intelligent human observer is still the most sensitive of evaluative measuring instruments and like other sensitive instruments is in need of constant regulation, correction and maintenance. But these disadvantages are outweighed by the ability of the human observer to react to changes in cultural context, to sense and react to qualitative cues, and to continuously change hypotheses with continued empirical observation.

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MOTIVATIONAL AND DIAGNOSTIC FACTORS IN PSYCHOTHERAPY*

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The questions posed by the practice of psychotherapy are many and varied, and basic to all is the problem of prediction. Will the patient improve? Is the therapeutic relationship to be a long-term, intensive effort, or a relatively short and supportive one? What kind of patient is seen in therapy and what predictions may be made from knowledge of the patient and therapy variables? These are but a few of the problems which demand research effort.

Veterans of World War II comprise about a 10 per cent sample of our total population, and among this veteran group many thousands have been in psychotherapy during and since the war. Because such a large sample is represented, even though it definitely is a selected one in terms of military and naval selection procedures, the present authors undertook to study patient and therapy variables of a sample of veterans in treatment for psychiatric illness. The sample to be reported numbers 638 male veterans seen therapeutically during the period of January 1946 to June 1948, inclusive. This is a total sample for the period, including 63 veterans who did not return after an initial contact during which only a brief history was taken. The sample does not include 12 female veterans who were not studied because their number was so small in the total sample. The veterans all were seen in a Veterans' Mental Hygiene Contract Clinic and the case of each had been closed before the end of June 1948.

The case records of the veterans were coded for the factors shown in table I, and an IBM card was punched for each case.† The 638 cards then were sorted for the various factors, and the distributions are reported in table I. It can be seen that there are numerous approaches to this study in that any of the case factors may be used as a baseline against which to sort. It was felt that one fruitful approach might lie in the relationship to the other variables of the number of therapeutic sessions experienced by the patients. An earlier study[2] reports these findings. A second report[1] deals with the family situation in which the patient was reared, and against the six categories of this factor there were sorted the other patient and therapy variables. The present study is concerned with 1) the motivational factors as reflected in pension application, and 2) diagnosis.

*The opinions expressed here are those of the authors and do not represent the opinions or policy of the Veterans Administration.

†Grateful acknowledgement is made to Mrs. Barbara Richman for coding the records, and to Mr. Ralph Hollerorth and his staff for assistance in punching and sorting IBM cards.

The veteran's application for a pension for his disability was treated in light of the motivational factors possibly involved. Those who did not file but continued to come for treatment could be considered as well-motivated, unlike those veterans who came only because their attendance insured their pensions. Next, the factor of diagnosis is analyzed because of the significance of the type of psychiatric illness in its relationship with the other factors examined.

In table I are reported the six groups representing classification according to pension application and diagnosis. Thus, column A consists of the 424 veterans who applied for pensions on the basis of their psychiatric illness; column B is composed of the 151 veterans who did not file for pensions; columns C, D, and E include veterans with the diagnostic categories of psychoneurosis, character disorder, and schizophrenia, respectively; and column F includes the 63 veterans who did not return following their initial clinic contact, and therefore were not brought into a treatment relationship. The latter group of 63 is not a part of the total number of 575 reported in the first column.

TABLE I

PER CENT DISTRIBUTION OF PATIENT AND THERAPY VARIABLES OF 575 MALE VETERANS IN PSYCHOTHERAPY

Factor	*Group N*	*Total* 575	*A* (9a)[1] 424	*B* (9b) 151	*C* (24b) 361	*D* (24c) 59	*E* (24d)[2] 34	*F* (14b)[3] 63
1. Age								
a. teens		2	1	2	1	0	3	3
b. 20 s		60	58	66	60	60	69	59
c. 30 s		33	35	26	34	34	25	32
d. 40 s		5	6	6	5	6	3	6
2. Marital status								
a. single		43	37	54	41	36	66	40
b. married		50	56	38	52	51	25	51
c. sep., div., wid.		7	7	8	7	13	9	9
3. Race								
a. white		88	89	89	89	92	97	82
b. Negro		12	11	11	11	2	3	18
4. Branch of service								
a. Army		72	72	67	72	76	71	65
b. Navy (incl. Coast Guard)		23	22	28	23	22	23	29
c. Marine		5	6	5	5	2	6	6
5. Length of service (months)								
a. less than 10		9	9	7	9	10	3	5
b. 10–19		9	11	5	7	12	26	11
c. 20–29		19	20	15	20	20	15	29
d. 30–39		34	32	39	35	27	38	32
e. 40–		29	28	34	29	31	18	23

[1] ( ) represents the factor under study.

[2] Of the 61 psychotics treated, 34 were schizophrenic, the largest single diagnostic classification.

[3] The 63 veterans of column F are not included in the total N of 575 because they were not brought under treatment.

Factor	Group Total	A (9a)[1]	B (9b)	C (24b)	D (24c)	E (24d)[2]	F (14b)[3]
N	575	424	151	361	59	34	63
6. Combat experience							
a. combat	59	58	62	60	55	53	59
b. no combat	41	42	38	40	45	47	41
7. Position of patient in family constellation							
a. only child	15	15	16	13	24	15	10
b. oldest	24	23	28	24	26	29	22
c. youngest	26	26	26	26	29	29	30
d. other	35	36	30	37	21	27	38
8. Family situation in which patient was reared							
a. family intact	43	43	45	44	39	38	45
b. mother dead or deserted	10	9	9	8	12	6	11
c. father dead or deserted	16	16	17	16	10	18	19
d. both parents dead or deserted	6	8	3	6	10	6	6
e. friction between parents	16	16	18	16	1)	18	8
f. friction with father	9	8	8	10	10	14	11
9. Application for pension							
a. filed	74	100	0	74	74	71	60
b. did not file	26	0	100	26	26	29	40
10. Referral source							
a. V. A.	39	47	21	42	30	31	54
b. Veterans organizations	17	17	5	15	13	6	13
c. American Red Cross	8	4	6	4	2	6	3
d. interested person	5	4	8	4	8	3	10
e. family or relative	2	2	4	2	6	9	0
f. school	5	3	6	4	4	6	3
g. hospital or doctor	14	13	29	16	27	9	10
h. social agency	2	4	10	5	4	18	2
i. self	7	6	10	8	6	12	5
j. religious groups	1	0	1	0	0	0	0
11. Accepted for treatment (season)							
a. winter	43	42	30	42	47	38	30
b. spring	21	22	26	22	19	26	28
c. summer	20	19	27	19	22	18	24
d. fall	16	17	17	17	12	18	18
12. Accepted for treatment (year)							
a. 1946	52	45	64	49	72	62	40
b. 1947	40	45	32	44	19	20	48
c. 1948	8	10	4	7	9	18	12
13. Other family member treated							
a. no other	78	79	76	80	72	59	94
b. wife	14	14	14	14	19	12	2
c. other	8	7	10	6	9	29	4
14. Initial clinic contact							
a. intake interview	89	100	100	85	100	100	100
b. no intake interview	11	0	0	15	0	0	0
15. Frequency of treatment							
a. weekly and/or more often	22	19	28	25	26	22	22
b. monthly and/or more often	13	13	13	49	42	31	32
c. only one time	24	23	28	18	19	34	30
d. other intervals	41	45	31	8	13	13	16

Factor	Group Total N 575	A (9a)[1] 424	B (9b) 151	C (24b) 361	D (24c) 59	E (24d)[2] 34	F (14b)[3] 63
16. Number of therapeutic sessions							
a. 1–4	65	61	68	60	60	62	70
b. 5–9	20	19	16	21	26	19	19
c. 10–19	11	12	6	14	13	12	3
d. 20–	4	8	10	5	1	7	8
17. Number of appointments broken							
a. none	36	36	36	32	51	44	48
b. 1	30	29	34	31	18	32	35
c. 2	16	15	17	17	18	9	3
d. 3	8	8	8	9	9	3	7
e. 4	6	7	2	6	0	6	4
18. Final appointment							
a. kept	46	49	36	45	45	59	0
b. broken	54	51	64	55	55	41	100
19. Treatment terminated (season)							
a. winter	25	24	23	21	21	19	25
b. spring	33	34	31	33	40	34	35
c. summer	20	20	27	23	21	19	22
d. fall	22	22	19	23	18	28	18
20. Treatment terminated (year)							
a. 1946	37	32	47	33	49	50	37
b. 1947	46	48	46	47	38	34	52
c. 1948	17	20	7	20	13	16	11
21. Treatment terminated by							
a. therapist	47	48	42	43	55	65	0
b. patient	53	52	58	57	45	35	100
22. Psychiatric status at close of treatment							
a. no change, unimproved	61	61	61	56	80	82	100
b. improved	39	39	39	44	20	18	0
23. Disposition of patient after treatment							
a. none noted	64	64	65	69	65	32	72
b. social agency	14	14	11	14	13	9	1
c. hospital	11	13	7	6	4	56	14
d. clinic or private M.D.	11	9	17	11	18	3	13
24. Therapist s diagnostic impression							
a. epilepsy or mental deficiency	2	2	1	0	0	0	9
b. psychoneurosis	63	62	52	100	0	0	61
c. character disorder	10	8	10	0	100	0	9
d. psychosis	11	7	9	0	0	100	7
e. other	14	21	28	0	0	0	14

Inspection of table I yields a "typical" veteran who was in his twenties, married, white, and ex-Army with 2½ to 3 years of service including combat experience. He was other than an only child or oldest or youngest of his siblings, and had been reared in an intact family situation. The veteran had applied for a pension because of his disability, had been referred for treatment in the winter of 1946 after an intake interview by a social worker, was treated less frequently than weekly but

more often than monthly, and no other member of his family had been brought under treatment. Once under treatment, he broke no appointments before breaking treatment; therapy was terminated by him rather than by the therapist in the spring of 1947; the therapist noted that the veteran's psychiatric status had not improved but did not note what disposition of the case followed, and the illness was diagnosed as psychoneurosis.

It can be seen that the "typical" patient, representing the 575 veterans (excluding the 63 veterans who did not come under treatment) in terms of modal incidence of the 24 factors, is not typical of all of the six groups studied. For example, among those veterans who did not apply for pension (column B) the modal marital status is single, as was true also for the group of veterans diagnosed as schizophrenic (column E), unlike the married status which is modal for the four other groups. Such variations in modal incidence of factors are seen also in several other variables. The modal treatment of data is not, however, a rigorous statistical test of significance of differences or relationships. The technic best suited for such a test of significance is the chi-square method. This method of statistical analysis[3] yielded information on the probabilities that observed frequencies in the distribution were significant departures from theoretical frequencies calculated from marginal totals of the 2 x 2 tables set up for the various factors. Chi-square values were not computed where cell frequencies were fewer than five. As criterion of significance, the generally accepted level of P in the .05–.01 range was used. At this level of confidence, 95 to 99 times in 100 the observed variations will not be due to chance occurrence, but will indicate significant relationships.

MOTIVATION FOR TREATMENT

In table I are summarized the data on three major groups of the total number of veterans studied—group A, consisting of those veterans who applied for pension on the basis of their psychiatric illness and whose motivation, at least in this respect, differs from the veterans comprising group B who did not file for pension, and group F which contains the veterans who did not return to see a therapist after an initial intake interview by a psychiatric social worker. Each of these groups differed significantly from the other two in certain respects. A number of factors did not, however, differentiate the three groups—age, race, branch of service, combat experience, position of veteran in his family constellation, season during which the patient entered treatment, intake interview, contact, and season during which therapy was terminated. Although there were variations in distribution of these characteristics, these variations were not significantly greater than chance.

Group A, the largest group among the 638 veterans studied and comprising two-thirds of the total number, was identified by application for pension—every member of the group had filed for pension for his psychiatric disability. Thus, these veterans were significantly unlike the 151 members of group B and the 63 members in group F. The latter group did, however, approach group A in incidence of pension application although in smaller proportion.

Among the 424 veterans of group A, only 19 per cent came for treatment as frequently as weekly or more often (28 per cent of the 151 veterans, those who had not applied for pensions, came this often), and 45 per cent came at intervals other than weekly or monthly or more often, compared to 31 per cent of group B. Frequency of treatment was not a characteristic of the 63 veterans of group F, nor were number of therapy hours and appointments broken, for this group had not entered treatment, had broken the first appointment scheduled with a therapist and therefore had also broken the final appointment arranged. Thus, 100 per cent of this group had broken an appointment and this was their only appointment for they did not return following their initial clinic contact. Also, in every instance, it was the veteran and not his therapist who had terminated the therapeutic relationship.

Although it was the authors' hypothesis that the 151 veterans who did not apply for pensions were better motivated for treatment than the 424 in group A, more of the latter (49 per cent) kept their final appointment and were terminated by the therapist (48 per cent) than was observed among the former 151 (36 per cent and 42 per cent, respectively). However, only the first factor, final appointment, significantly differentiates the groups, and the latter factor's distribution is a trend only.

It can be seen then from table I that group A is significantly different from B and F only in a few instances. Group B differs from A and F in several other respects than those reported above. These 151 veterans tended to be more often in their 20's than 30's, although this is a trend and not statistically significant. This trend may, however, also be related to marital status, for about as many veterans of group B, proportionately, were single as the percentages of A and F who were married. Further, the fact that in group B were those who did not apply for pensions suggests that the relatively fewer responsibilities of youth and of single marital status may have been significant in their failure to file, in contrast with the economy of older, married veterans for whom pension moneys may have constituted a considerable portion of their income.

Among the three factors of military service which were studied—branch and length of service, and combat experience—only length of service varied significantly among the three

groups. Five per cent of group B served 10 to 19 months (11 per cent of A and F served this period), 15 per cent served 20 to 29 months (compared to 20 to 29 per cent of groups A and F), and 3 out of 4 of their number served for periods of 30 months or more. In the other groups, 55 to 60 per cent served for periods as long as 30 months or more, 13 to 18 per cent fewer than in group B. Thus, significantly more veterans among those who did not file for pensions had served 2½ years or longer, and in this sense may have been more entitled to some recompense yet did not apply for it. It was this group, too, which had a slightly larger proportion of its number who had seen combat duty, although this difference was not significant statistically.

A factor reported in table I which significantly differentiated the 151 nonpension veterans from the others was referral source. Only 21 per cent of the 151 group came from another Veterans Administration agency, compared to the 47 to 54 per cent of the 424 and 63 groups; 5 per cent from veterans' organizations (American Legion, VFW, Disabled Vets, etc.), in contrast with 13 to 17 per cent of the other two groups; and 49 per cent had been referred by a hospital, private physician, or were self-referred, more than twice the proportion (17 to 23 per cent) found in groups A and F. Thus, half of the 151 group had not contacted a governmental or other veterans' agency, at least to the extent of referral, while about two-thirds of the other two groups had visited at least one such agency.

Although 2 out of 3 veterans among those who did not file for pension came under treatment in 1946, less than half (40 to 45 per cent) of the two other groups began therapy this early after World War II. Further, this group more often came weekly and/or more often for treatment, to the extent of 28 per cent of its number, while only 19 per cent of the veterans who had applied for pension came this frequently. This distribution might suggest that the 151-group was more ill than the 424- and 63-groups, therefore was more in need of frequent treatment. It can be seen in table I that of the former group, in 19 per cent the diagnosis was character disorder or psychosis, compared to 15 to 16 per cent of the other two groups, but this difference is no more than a trend and is not statistically significant. Also, although 2 out of 3 of the nonpension veterans failed to keep the final appointment scheduled, indicating a disturbed therapeutic relationship, just half of the pensioned group broke the final appointments, and every one of the 63 veterans of column F failed to keep their appointments. Thus, although the 151 veterans have been considered the most highly motivated group, in terms of not applying for pension ("sickness benefit"), they were not well motivated for treatment when one examines the rate at which the group members failed to keep the appointment scheduled at the time they discontinued psychotherapy.

Further information about this latter group is afforded in item 20 of table I. This group, which had most members terminating treatment in 1946, also was the group whose members most often entered treatment in the same year, 1946. Therefore, many of their number, nearly half (47 per cent) of the total N, contacted the clinic in this first postwar year and terminated in the same year, while groups A and F were distributed much more alike, both in year treatment was begun and year of termination.

Finally, group F, the smallest of the three groups presently under discussion, was differentiated from groups A and B only with respect to a few factors. The major distinguishing characteristic of these 63 veterans was, of course, their vanishing from the therapeutic scene before they had even begun therapy. More of this group tended to have experienced 20 to 29 months of military service, and fewer proportionally had served more than 40 months than was observed in groups A and B. Also, fewer of the 63 were only children but more were youngest members of their respective families than was true in the other two groups. Again, it should be noted that these distributions represent trends only, and do not have statistical significance.

Although only 8 per cent of group F reported friction between parents, a proportion one-half of that in groups A and B, this difference might not hold were more information available. It should be remembered that the former group was seen but one time, and further interviews may well have indicated greater incidence of interparental friction. Further information also may have resulted in bringing to light the need for treating other members of the patient's family, so that the 94 per cent "no other" in group F would approximate more closely the 76 to 79 per cent of the other two groups.

In attempting to follow up the 63 veterans who did not return to the clinic following their initial contact, it was noted that only one was followed by a social agency, in contrast to the 11 to 14 per cent of groups A and B. Yet, as many of the former group, proportionally, went to hospital, other clinic, or private physician as did veterans of the latter groups. The reason for these differing distributions may be in the greater incidence of organic dysfunction among the 63 veterans: in nearly 1 in 10 the diagnosis was epilepsy or mental deficiency. In only 1 to 2 per cent of the 575 other veterans was such a diagnosis made, while about 1 in 4, 21 to 28 per cent, were other than epilepsy, mental deficiency, neurosis, character disorder, or psychosis, an incidence nearly double that among the 63 veterans of group F.

In summary then, comparisons of the characteristics of veterans in groups A, B, and F of table I did not reveal statistically significant differences among the three groups with respect

to age, race, branch of service, combat experience, birth order, initial clinic contact, or season of year during which treatment closed. The 424 veterans who had applied for pensions differed from the other two groups in the factors of season during which therapy was begun, frequency of treatment and keeping the final appointment scheduled. The 151 veterans who had not made application for pensions, and therefore were considered better motivated than the other groups, differed from the latter in marital status, length of military service, source of referral for treatment, postwar year during which therapy began, and year in which it was concluded, and disposition of case following psychiatric treatment at the contract clinic.

These two major groups, totalling 575 veterans, did not differ significantly between themselves in the distributions of age, race, branch of service, combat experience, birth order, family situation in which the veteran was reared, other family member brought into a treatment situation, initial clinic contact, number of therapy hours experienced, number of appointments broken, season in which therapy terminated, the veteran's breaking treatment and his psychiatric status at close of treatment. Both groups, however, differed significantly from the third group studied—the 63 veterans who did not return to the clinic after their initial contact. These differences were observed in the factors of family situation in which the veteran was reared, application for pension, other family member treated, disposition of case after treatment, and diagnostic classification based upon the therapist's impression.

DIAGNOSIS AS A DIFFERENTIATING FACTOR

Referring again to table I, one can see the largest single diagnostic group was composed of veterans treated as psychoneurotics by their therapists. This group numbering 361 was six to ten times and more larger than the groups of character disorder and schizophrenic veterans. Those in the latter group tended to be younger than the others, unmarried, white, with fewer serving very brief periods in the military (less than 10 months) or very long periods (40 months or more), fewer referred by veterans' organizations or by a hospital or physician but more often a self-referral or a social agency, and more often than the other diagnostic groups began therapy two to three years after the war was ended. Further, those in the veteran group in whom the diagnosis was schizophrenia had more other family members brought into treatment than occurred among the character disorder and psychoneurosis groups, more often came for treatment only one time, less often broke their appointments for therapy two or three times, but, more frequently than the others, kept their final appointment and were terminated by the

therapist, and for more than half of their number transfer to a hospital for further treatment followed close of therapy at the contract clinic. These data seem to reflect the more severe nature of the schizophrenic illness in that the therapist moved rapidly to hospitalize many of these patients from an outpatient basis.

The character disorder group differed from those in which the diagnosis was psychoneurosis or schizophrenia on the basis of 1) birth order, with the former group more often only children (24 per cent); 2) referral source, more of this group came to the clinic on advice of private physician or hospital; and 3) number of appointments broken, and in this respect more than half of the group broke no scheduled appointments, a treatment record exceeding that of the other groups by 7 to 19 per cent. It is interesting that in many of the 24 patient and therapy variables studied, the character disorder group showed a relative incidence of the various factors which was intermediate between the distributions of the psychoneurotic and the schizophrenic veterans.

Because of the major proportions of psychoneurotics among the number of veterans in therapy, 2 out of 3 in the present sample, this group is of particular interest. There were more Negroes in this group than in either of the other two diagnostic groups, four times as many, proportionally. The psychoneurotic tended less often to have been reared in a "stress" position in his family, i. e., 37 per cent of the psychoneurotics were other than only, oldest, or youngest child, while only 21 to 27 per cent of the other two groups were in the "other" birth order category. The neurotic group more often was referred to the contract clinic by another Veterans Administration agency (42 per cent were so referred), and less often (only 2 per cent) had the veteran come to the Clinic on advice of a family member or other relative. Further, fewer veterans came for treatment and terminated therapy in the first postwar year and many more came during the second year and terminated in 1947 to 1948 than was true for either of the other diagnostic groups. And, although 85 per cent had an intake interview on the initial clinic contact, this was 15 per cent less than in the other groups. This difference occurred although every new veteran was interviewed initially except those too disturbed to work through this first contact. Thus, even the schizophrenic group was seen by the social worker in every case, in spite of the generally accepted attitude of schizophrenia as a more severe illness than neurosis. The present data suggest that the acute effects of neurosis at times may be far more disturbing than a psychotic adjustment.

Moreover, the veterans suffering from psychoneurosis had a stormy course of therapy and only a third of the total group of 361 was able to endure the therapeutic relationship without breaking one or more appointments. This low tolerance is in

contrast to the 44 to 51 per cent of the character disorder and schizophrenic groups who continued treatment without breaking appointments. However, this difference in tolerance for the therapeutic relationship may have been an unhealthy sign in that it is possible that the latter groups already had such fixed defenses against therapeutic efforts that the patients were not stirred by therapy. This hypothesis is supported by the data of table I which indicate a 44 per cent improvement rate among the psychoneurotically ill, in contrast to the 18 to 20 per cent of the other groups who in the opinion of their therapists had improved. This difference was true even though more than half (57 per cent) of the former group broke treatment rather than wait until terminated by the therapists, while 35 to 45 per cent of the other groups terminated treatment in this way.

SUMMARY

Veterans of World War II comprise about a 10 per cent sample of our total population, and among this veteran group many thousands have been in psychotherapy during and since the war. Because such a large sample is represented, even though it definitely is a selected one in terms of military and naval selection procedures, the present authors undertook to study patient and therapy variables of a sample of veterans in treatment for psychiatric illness. Six major groups were represented in the sample of 638 male veterans studied—veterans who had applied for pensions on the basis of their psychiatric illness; those who did not file for pensions; veterans in whom the diagnosis was psychoneurosis, character disorder, or schizophrenia; and a group of veterans who did not return following their initial clinic contact, and therefore had not been brought into a treatment relationship. The first two groups, totalling 575 veterans, did not differ significantly between themselves in the distributions of age, race, branch of service, combat experience, birth order, family situation in which the veteran was reared, other family member brought into a treatment situation, initial clinic contact, number of therapy hours experienced, number of appointments broken, season in which therapy terminated, the veteran's breaking treatment and his psychiatric status at close of treatment. Both groups, however, differed significantly from the third group studied—the 63 veterans who did not return to the clinic after their initial contact. These differences were observed in the factors of family situation in which the veteran was reared, application for pension, other family member treated, disposition of case after treatment, and diagnostic classification based upon the therapist's impression.

The 424 veterans who had applied for pensions differed from the other two groups in the factors of season during which

therapy was begun, frequency of treatment and keeping the final appointment scheduled. The 151 veterans who had not made application for pensions, and therefore were considered better motivated than the other groups, differed from the latter in marital status, length of military service, source of referral for treatment, postwar year during which therapy began, and year in which it was concluded, and disposition of case following psychiatric treatment at the contract clinic.

In the analysis of the data on psychiatric diagnosis as a differentiating factor, it was observed that in many of the 24 patient and therapy variables studied, the character disorder group showed a relative incidence of the various factors which was intermediate between the distributions of the psychoneurotic and the schizophrenic veterans.

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